

Pest Update (July 25, 2012)

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John Ball, Forest Health Specialist SD Department of Agriculture,
Extension Forester SD Cooperative Extension

Email: john.ball@sdstate.edu

Phone: 605-688-4737

Samples sent to: John Ball
Plant Science Department
rm 230, Agriculture Hall, Box 2207A
South Dakota State University
Brookings, SD 57007-0996

Note: samples containing living tissue may only be accepted from South Dakota. Please do not send samples of dying plants or insects from other states. If you live outside of South Dakota and have a question, instead please send a digital picture of the pest or problem. **Walnut samples may not be sent in from any location – please provide a picture!**

Available on the net at:

<http://sdda.sd.gov/Forestry/Educational-Information/PestAlert-Archives.aspx>

Any treatment recommendations, including those identifying specific pesticides, are for the convenience of the reader. Pesticides mentioned in this publication are generally those that are most commonly available to the public in South Dakota and the inclusion of a product shall not be taken as an endorsement or the exclusion a criticism regarding effectiveness. Please read and follow all label instructions and the label is the final authority for a product's use on a particular pest or plant. Products requiring a commercial pesticide license are occasionally mentioned if there are limited options available. These products will be identified as such but it is the reader's responsibility to determine if they can legally apply any product identified in this publication.

In this issue	pg
Plant Development.....	2
Current concerns	
More drought concerns.....	2
E-samples	
Identification of buckthorn and honeysuckle fruit.....	3
Identification of white poplar.....	4
Samples received	
Bennett County (drought injury).....	4
Brule County (smaller European bark beetle).....	4
Lawrence County (shoots wilting on spruce).....	4
Pennington County (Schubert chokecherry identification).....	5
Sully County (quince-cedar rust).....	5
Tripp County (aphids on walnuts).....	5
Turner County (European elm scale).....	5
Walworth County (hackberry nipple gall).....	5



Plant development

The hydrangeas are in full bloom, very typical for this time of year. They do not look too happy about flowering during the heat and since hydrangeas are known as “water pigs” – keep the hose on them!

Current concerns

The continuing drought

While some areas of South Dakota received much needed rains in the last week, much of the state remains dry. Trees, along with all other vegetation, are showing symptoms of severe drought -stress. Here are the symptoms to look for on deciduous and conifer trees.



The symptoms of severe drought-stress for deciduous trees include leaf scorching (margins of the leaf and area between veins turning brown), yellowing, wilting and eventually shedding, beginning first with the oldest leaves and progressing to the youngest if the drought continues. This loss of leaves in some species is a mechanism to survive the severe moisture deficit and three species that have this trait, green ash, black walnut and Ohio buckeye, are already

dropping their leaves. Other species, such as cottonwoods and willows, will even shed small branches and twigs and I have seen yards lately that are covered with shed branches from large cottonwoods.



The symptoms of severe drought-stress for conifers include needle browning then yellowing on pines and needle tips turning yellow then red for spruce. Eventually the older needles are shed, and then the younger ones, in fact already seeing a number of shoot tips wilting and curling. While these symptoms can be caused by pathogens and pests (as well as herbicide); they can also occur if the shoots are expanding in hot, dry weather. Many spruce are already

beginning to decline from the hot, dry conditions as they are the most sensitive to

drought, however, even ponderosa pines, one of our more drought-tolerant trees, is also beginning to show some needle discoloration and loss of the older needles..

What can be done now? Even if your tree is beginning to shed leaves it should still be watered on a regular basis. The buds, tender shoots, fine roots and other parts still require water and continuing to irrigate will improve the chances that the tree will resume normal growth the next year. We are also coming up to the time when trees begin to prepare for winter and a stressed tree is less likely to complete the hardening process and will be more susceptible to winter injury. Watering trees, particularly conifers, *from mid-August through September is critical to their winter survival.* An established tree in the yard should be receiving a slow soaking about once or twice a week for at least 30 minutes and the water should be applied within the radius of half the tree's height. This is enough water to allow the tree to survive under the severe drought conditions found in the western part of the state, not to thrive. Water is the only resource trees need at this time. Do not fertilize these drought-stressed trees and avoid any herbicide use if possible as the addition stress may further injure the tree.

E-samples



It is a “berry” good day. I received two emails regarding the identification of fruit-bearing shrubs. The first picture shows the common buckthorn (*Rhamnus cathartica*). This shrub is native to Europe and western Asia and was popular as an ornamental hedge plant in the early 1900s. Unfortunately birds drop seeds everywhere and the shrub (which can reach the size of a crabapple tree) is now a common, but unwanted, fixture in shelterbelts, woods

and almost any vacant lot in towns. Not only is it an invasive “weed” but it also is an alternate food source for the soybean aphid and the rust disease, crown rust. The berries will soon turn a glossy black, almost cherry-like, but do not eat them as the effect is described as “sudden and violent diarrhea.” The second picture was of the tatarian honeysuckle (*Lonicera tatarica*). This is a common ornamental and shelterbelt shrub that also has been extensively planted by birds. The fruit, a bright red berry, form in the leaf axils, not at the terminals, as do many other fruits. This is also a fruit best left to the birds, do not eat them!





Mystery plant occurring in the state. I got several e-samples in the past week of the same tree. Several folks have noticed this plant sprouting from old stumps and coming up through the parched grass in their lawn. This is the white poplar (*Populus alba*), probably one of the toughest, most persistent trees in our state (and some of the tallest trees in West River communities). This tree is native to southern Europe through central Asia and is at home in our cold winters and hot, dry summers. It is almost impossible to kill. Sometimes that can be a problem as the tree frequently sends up sprouts throughout the yard, even years after “mom” is cut down.

Samples received

Not many this week but we are at the peak of the summer heat and who wants to go out and look at their trees anyway?

Bennett County

Why are these leaves drying up and dying throughout the tree. There are several other trees with the same symptoms and these trees are being watered.

This is still drought injury, not a disease. The problem down in the southwest is has been too dry and too hot and even with supplemental watering the trees are suffering. Water loss on these hot, dry days is faster than the tree can replace.

Brule County
tree?

What is attacking this American elm

Thank you for sending the sample of the bark as there is an imprint of the galleries (tunnels) that the insect made. Galleries are a useful diagnostic clue as they are very characteristic for each boring insect. The galleries in this bark were formed by the smaller European elm bark beetle (*Scotylus multistriatus*). This is our most common means of spreading Dutch elm disease from tree to tree (the other being root grafts between diseased and healthy trees).

Lawrence County

Why are the tips of this white spruce curling? The trees are out near Whitewood.

There were no signs of any pathogen or insect so I suspect this is just due to the hot, dry weather (see the information above on drought injury). The pattern of wilted tips is often random within and between trees and the tips do not recover.

Pennington County

What kind of tree is this?

This is a Schubert chokecherry (*Prunus virginiana* 'Schubert') a common ornamental cherry that seems to be producing an abundance of fruit this season. The fruit is excellent for jams, jellies, and wine. If you don't have a sweet tooth, the fruit is not too bad eaten right off the tree though most would say it is a little bitter.

Sully County

The leaves on this plum have spikes coming out of spots on the underside of the leaves. What is wrong with this tree?

The spikes are from a rust disease but the leaf is not a plum but a hawthorn. This is the quince-cedar rust mentioned in an earlier *Update*.

Tripp County

Why are the leaves and fruit falling off the walnut? The leaves are very sticky.

Some of the premature leaf and fruit drop is due to the drought. Walnuts will commonly shed these when faced with dehydration. However in addition to water loss, the tree is being attacked by aphids and the sap removal from the leaves is also resulting in early leaf fall. The aphids are also secreting honeydew, a sticky substance. The aphids are easily controlled with a soil drench of imidacloprid sold as Bayer Advance Tree and Shrub Insect Control. This application should be made either later this autumn or just after the leaves open next spring. Do not wait to do a soil drench until you see the aphids – it's too late then.

Turner County

Why are the leaves on this elm covered with this sticky mist? I have enclosed a bug I found on the tree.

The reason for the sticky mist is the European elm scale, a soft scale that, as with aphids, secretes a sticky substance called honeydew that also becomes covered with black matting from the sooty mold fungus. The insect included in the envelope was a larva of the ladybeetle and this is a predator of the European elm scale crawlers, the immature form of the scale. The best control is a soil drench of imidacloprid sold as Bayer Advance Tree and Shrub Insect Control. I recommend making the application next spring, just as the leaves open, or this autumn.

Walworth County

This tree is almost bare near the top and the homeowner has been raking for the past three days. What is the problem?

This is a hackberry tree and the leaves are covered with the hackberry nipple galls. The galls are unsightly but otherwise do not harm the tree but may their presences may be responsible for some of the leaf fall. Drought is probably the reason for much of the fall. Hackberries will typically begin shedding leaves during periods of moisture stress.